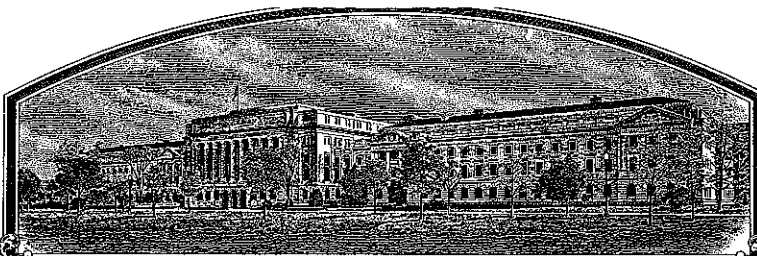


No.

200300079



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Hybas Vegetable Seed Co. Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Big Country'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of December, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

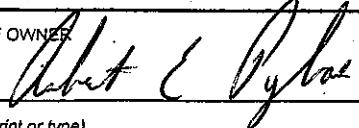


U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Pybas Vegetable Seed Co., Inc		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME PYB 6529	3. VARIETY NAME Big Country
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 301 N. Depot Street P.O. Box 868 Santa Maria, CA 93456		5. TELEPHONE (include area code) (805) 922-4624	FOR OFFICIAL USE ONLY PVPO NUMBER 200300079
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION California	6. FAX (include area code) (805) 928-0293
9. DATE OF INCORPORATION 12-16-83			FILING DATE 1-16-2003
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Keith Trammell Pybas Vegetable Seed Co. 301 N. Depot St. P.O. Box 868 Santa Maria, CA 93456			FILING AND EXAMINATION FEES: \$2705.00 DATE 1/16/2003 CERTIFICATION FEE: \$682- DATE 10/18/05
11. TELEPHONE (include area code) (805) 922-4624	12. FAX (include area code) (805) 928-0293	13. E-MAIL	14. CROP KIND (Common Name) Lettuce
15. GENUS AND SPECIES NAME OF CROP Lactuca scativa		16. FAMILY NAME (Botanical) Compositae	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no", go to item 22)	
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED NUMBER 1,2,3, etc. (If additional explanation is necessary, please use the space indicated on the reverse.)	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Robert E. Pybas		NAME (Please print or type)	
CAPACITY OR TITLE President	DATE	CAPACITY OR TITLE	DATE 1

200300079
To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Complete application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for any other variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (irish potato) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$320 filing fee and \$2,385 examination fee, payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If a new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

First date of sale 1-17-02 USA. We market our seed through a dealer network and have no direct knowledge of sales of crops of 'Big Country'.

1-16-02 RAD 9/14/05

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089; <http://www.ams.usda.gov/lsg/seed/lsg-sd.htm>

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

EXHIBIT A

Origin and Breeding History of 'Big Country'

'Big Country' was developed using the pedigree breeding method. It was derived from the cross 'Bautista' x 'Darkland Cos' made during the summer of 1995 in the field in the San Joaquin Valley.

Details of the development process of 'Big Country' follows:

The F1 was seeded into trays in September of 1995, then transplanted to large pots in the green house. The F2 seed was harvested in early spring 1996.

The F2 seed was planted to a field in March 1996 known to be moderately infested with corky root. The F2 population segregated for corky root resistance, plant size, and for intensity of green color. Thirteen of the largest and darkest green plants free of tip burn were selected. Axillary buds from the cores of these plants were excised, tissue cultured, and the resultant rooted plantlets were transplanted to the green house in July, 1996. Only six of the original thirteen survived to produce F3 seed in September of that year.

The six F3 lots were seeded to a lettuce mosaic virus test in early 1997. From one of these plots three apparently resistant plants were selected and transplanted to the green house. All three plants produced F4 seed in the summer of 1997.

In June of 1998 the three F4's were planted to a trial in Santa Maria in a field with a history of severe corky root. One of the three lines was determined to be corky root susceptible based on their poor growth and by inspection of the tap roots. The other two lines were resistant. From one of the resistant lines, three dark green plants free of tip burn were selected and removed to the green house where they produced F5 seed in the fall of 1998.

The three F5 lots were planted to a trial in April of 1999 in Santa Maria. There was good uniformity within and between the F5 sisters with all exhibiting dark green color, freedom of tip burning, and had smooth attractive butts. The line was designated as PYB 6529, and ten selected plants from this trial were potted in the green house for a small increase. The seed off these plants was bulked (F6B) at harvest in September, 1999.

The resultant F6B lot was planted in several trials through out the Santa Maria Valley during the 2000 growing season, where it was again observed to be consistently uniform and stable. In the same year it was also planted as stock seed for a larger bulk increase in the San Joaquin Valley. This resultant seed crop (F7B) was indexed for lettuce mosaic

virus, coated and distributed to our dealers for extensive trialing in 2001, in which it was once again observed to be both uniform and stable.

'Big Country' has been observed to be uniform and stable for the last three generations of its development and in its first commercial increase in 2001.

No variants or off-types have been observed in 'Big Country'.

The first commercial sale of 'Big Country' was on January 17, 2002.

EXHIBIT B

Statement of Distinctness

'Big Country' (PYB 6529) is most similar to the variety 'Darkland Cos', its' male parent. Both are similar in appearance and read the same on the Royal Horticultural Society Color Chart (138A).

However, 'Big Country' differs from 'Darkland Cos' in that it is corky root resistant whereas 'Darkland Cos' is not. 'Big Country' also produces a heavier mature plant than 'Darkland Cos' (722 gms Vs 614 gms) and has a longer core at harvest maturity (66 mm Vs 53 mm). These figures are the means of the trials reported in this exhibit.

The dark color of 'Big Country' easily distinguishes it from its' lighter colored female parent, 'Bautista'. 'Bautista' reads 138B on the Royal Horticultural Society Color Chart.

The cotyledon shape for 'Big Country' is intermediate while it is broad for 'Darkland Cos', and the butt midrib of 'Big Country' is moderately raised while it is flat in 'Darkland Cos'.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED DIVISION

EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY
LETTUCE *Lactuca sativa*

NAME OF APPLICANT (S) Pybas Vegetable Seed Co., Inc	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 301 N. Depot St. P.O. Box 868 Santa Maria, CA 93456	VPFO NUMBER 200300079
	VARIETY NAME
	EXPERIMENTAL DESIGNATION

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of well spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is: Central California coast	Color System Used: Royal Horticultural Soc. Color Chart
--	---

1. PLANT TYPE: (See list of suggested check varieties page 4.)

04

01=Cutting/Leaf
02=Butterhead
03=Bibb
04=Cos or Romaine

05=Great Lakes Group
06=Vanguard Group
07=Imperial Group
08=Eastern (Ithaca) Group

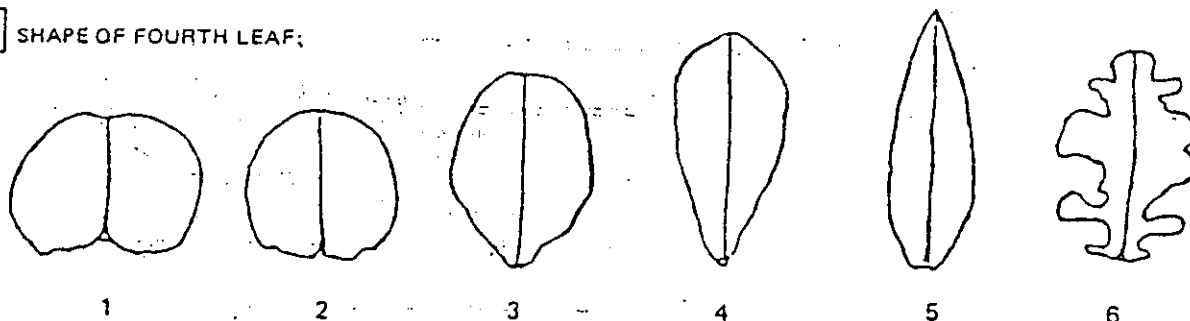
09=Stem
10=Latin
11=OTHER

2. SEED:	COLOR	LIGHT DORMANCY	HEAT DORMANCY
1	1=White (Silver Gray) 2=Black (Gray Brown) 3=Brown (Amber)	1 1=Light Required 2=Light Not Required	1 1=Susceptible 2=Not Susceptible

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

2 SHAPE OF COTYLEDONS: 1=Broad 2=Intermediate 3=Spatulate

3 SHAPE OF FOURTH LEAF:



18 LENGTH/WIDTH INDEX OF FOURTH LEAF: L/W x 10

1 APICAL MARGIN:	1=Entire	4=Moderately Dentate	7=Lobed
1 BASAL MARGIN:	2=Crenate/Gnawed	5=Coarsely Dentate	8=OTHER (specify)
	3=Finely Dentate	6=Incised	
1 UNDULATION:	1=Flat	2=Slight	3=Medium 4=Marked
4 GREEN COLOR:	1=Yellow Green	3=Medium Green	5=Blue Green 7=Gray Green
	2=Light Green	4=Dark Green	6=Silver Green
ANTHOCYANIN:			
1 DISTRIBUTION:	1=Absent	3=Spotted	5=OTHER (specify)
	2=Margin Only	4=Throughout	
1 CONCENTRATION:	1=Light	2=Moderate	3=Intense
1 ROLLING:	1=Absent	2=Present	
1 CUPPING:	1=Uncupped	2=Slight	3=Markedly
1 REFLEXING:	1=None	2=Apical Margin	3=Lateral Margins

6

4. MATURE LEAVES (observe harvest-mature outer leaves):

NOTE: Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics.

MARGIN:

<input type="checkbox"/> 1	INCISION DEPTH: (deepest penetration of the margin)	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
<input type="checkbox"/> 1	INDENTATION: (finest divisions of the margin)	1=Entire (Dark Green Boston)	3=Deeply Dentate (Great Lakes 659)	5=OTHER (specify)
<input type="checkbox"/> 1		2=Shallowly Dentate (Great Lakes 65)	4=Crenate (Vanguard)	
<input type="checkbox"/> 1	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659)
<input type="checkbox"/> 5	GREEN COLOR:	1=Very Light Green (Bibb)	3=Medium Green (Great Lakes)	5=Very Dark Green
		2=Light Green (Minetto)	4=Dark Green (Vanguard)	6=OTHER
ANTHOCYANIN (grown at or below 10 C):				
<input type="checkbox"/> 1	DISTRIBUTION:	1=Absent	3=Spotted (Calif. Cream Butter)	5=OTHER (specify)
		2=Margin Only (Big Boston)	4=Throughout (Prize Head)	
<input type="checkbox"/>	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
<input type="checkbox"/> 3	SIZE:	1=Small	2=Medium	3=Large
<input type="checkbox"/> 2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
<input type="checkbox"/> 2	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
<input type="checkbox"/> 3	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
<input type="checkbox"/> 1	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

5. PLANT (at market stage. Choose a comparison variety appropriate for this type.):

SPREAD OF FRAME LEAVES:

☐ 3 ☐ 5 cm This Variety ☐ 3 ☐ 4 cm Darkland Cos (specify comparison variety)

HEAD DIAMETER (market trimmed with single cap leaf):

☐ ☐ cm This Variety ☐ ☐ cm Non-heading Romaine type (specify comparison variety)☐ 5 HEAD SHAPE: 1=Flattened 2=Slightly Flattened 3=Spherical 4=Elongate 5=Non-Heading 6=OTHER☐ HEAD SIZE CLASS: 1=Small 2=Medium 3=Large☐ 2 ☐ 4 HEAD COUNT PER CARTON

HEAD WEIGHT:

☐ 7 ☐ 2 ☐ 2 g This Variety ☐ 6 ☐ 1 ☐ 4 g Darkland Cos (specify comparison variety)☐ 1 HEAD FIRMNESS: 1=Loose 2=Moderate 3=Firm 4=Very Firm

6. BUTT (bottom of market-trimmed head):

☐ 3 SHAPE: 1=Slightly Concave 2=Flat 3=Rounded☐ 2 MIDRIB: 1=Flattened (Salinas) 2=Moderately Raised 3=Prominently Raised (Great Lakes 659)

7. CORE (stem of market-trimmed head):

☐ 3 ☐ 5 mm Diameter at base of head☐ ☐ ☐ Ratio of head diameter/core diameter

Core height from base of head to apex:

☐ 6 ☐ 6 mm This Variety ☐ 5 ☐ 3 mm Darkland Cos (specify comparison variety)8. BOLTING (Give First Water Date 4-16-02):

NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

Number of days from First Water Date to seed stalk emergence (summer conditions):

☐ 6 ☐ 6 This Variety ☐ 6 ☐ 9 Darkland Cos (specify comparison variety)☐ 3 BOLTING CLASS: 1=Very Slow 2=Slow 3=Medium 4=Rapid 5=Very Rapid

Height of mature seed stalk:

☐ 9 ☐ 3 cm This Variety ☐ 9 ☐ 4 cm Darkland Cos (specify comparison variety)

41

Spread of Bolter Plant (at widest point):

cm This Variety

43

cm Darkland Cos

(specify comparison variety)

1

BOLTER LEAVES:

1= Straight

2= Curved

1

MARGIN:

1= Entire

2= Dentate

3

COLOR:

1= Light Green

2= Medium Green

3= Dark Green

BOLTER HABIT:

2

TERMINAL
INFLORESCENCE:

1= Absent

2= Present

2

LATERAL SHOOTS:
(above head)

1= Absent

2= Present

1

BASAL SIDE SHOOTS:

1= Absent

2= Present

9. MATURITY (earliness of harvest-mature head formation):

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ #of days	Check 1/ #of days	CHECK VARIETY 2/
Spring	<input type="text"/>	<input type="text"/>	
Summer	63	64	Darkland Cos
Fall	<input type="text"/>	<input type="text"/>	
Winter	<input type="text"/>	<input type="text"/>	

Give planting date(s), and location(s):

Spring

Summer Plant date 5-23-02. Harvest date 7-26-02. Santa Maria, CA

Fall

Winter

1/ First water date to harvest.

2/ Fill in check variety name on the appropriate line.

10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION (tested and proven adapted):

(0=Not tested

1=Not Adapted

2=Adapted)

1

Southwest (Calif., Ariz. desert)

2

West Coast

0

Northeast

0

Northcentral

0

Southeast

0

OTHER

SEASON:

2

Spring (area West coast)

2

Fall (area West coast)

2

Summer (area West coast)

0

Winter (area)

0

GREENHOUSE:

0=Not tested

1=Not Adapted

2=Adapted

1

SOIL TYPE:

1=Mineral

2=Organic

3=Both

11. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- ☒ Big Vein
☐ Lettuce Mosaic
☐ Cucumber Mosaic
☐ Broad Bean Wilt
☐ Turnip Mosaic
☒ Beet Western Yellows
☐ Lett. Infectious Yellows
☐ Other Virus _____

FUNGAL/BACTERIAL

- ☒ Corky Root Rot (Pythium Root Rot)
☒ Downy Mildew (Races _____)
☐ Powdery Mildew
☒ Sclerotinia Rot
☐ Bacterial Soft Rot (Pseudomonas spp. & others)
☐ Botrytis (Gray Mold)
☐ OTHER _____

INSECTS

- ☐ Cabbage Loopers
☐ Root Aphids
☐ Green Peach Aphid
☐ Other Insect _____

PHYSIOLOGICAL/STRESS

- ☒ Tipburn
☐ Heat
☐ Drought
☐ Cold
☐ Salt
☐ Brown Rib (Rib Discoloration, Rib Blight)
☐ OTHER _____

POST HARVEST

- ☐ Pink Rib
☐ Russet Spotting
☐ Rusty Brown Discoloration
☐ Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)
☐ Brown Stain

12. BIOCHEMICAL OR ELECTROPHORETIC MARKERS:

13. COMMENTS:

SUGGESTED CHECK VARIETIESTYPE

- 1) CUTTING/LEAF
 2) BUTTERHEAD
 3) BIBB
 4) COS, OR ROMAINE
 5) GREAT LAKES GROUP
 6) VANGUARD GROUP
 7) IMPERIAL GROUP
 8) EASTERN GROUP
 9) STEM
 10) LATIN

CHECK VARIETY

SALAD BOWL
 DARK GREEN BOSTON
 BIBB
 PARRIS ISLAND
 GREAT LAKES 659-700
 VANGUARD
 VIVA
 ITHACA
 CELTUCE
 MATCHLESS

200300079



Fourth leaf of 20 day old seedlings of 'Big Country'



Mature leaf of 'Big Country'.

RHD
8/8/

Trial 1. Santa Maria, CA. Seeded: 5-23-02. Evaluated: 7-26-02.
 Sample size: 10 plants. Four Replications. Randomized Complete Block Design.
 ANOVA: $F(\text{req'd}) .05 = 10.13$ $F(\text{req'd}) .01 = 34.12$

<u>Frame diameter</u>	<u>Big Country</u>	<u>Darkland Cos</u>
Mean (cm)	34.3	34.4
Std. dev.	0.45	0.87
ANOVA:		
$F(\text{calc.}) = .049$ NS		

<u>Plant weight</u>		
Mean (gms)	846.6	746.6
Std. dev.	23.3	56.5
ANOVA:		
$F(\text{calc.}) = 19.68^*$		

<u>Core width</u>		
Mean (mm)	37.2	36.8
Std. dev.	0.64	1.69
ANOVA:		
$F(\text{calc.}) = 1.31$ NS		

<u>Core height</u>		
Mean (mm)	76.5	61.1
Std. dev.	1.20	3.03
ANOVA:		
$F(\text{calc.}) = 130.3^{**}$		

Trial 2. Guadalupe, CA. Seeded: 6-13-02. Evaluated: 8-12-02.
 Sample size: 10 plants. Four Replications. Randomized Complete Block design.
 ANOVA: $F(\text{req'd}) .05 = 10.13$ $F(\text{req'd}) .01 = 34.12$

<u>Frame diameter</u>	<u>Big Country</u>	<u>Darkland Cos</u>
Mean (cm)	35.9	34.2
Std. dev.	1.03	1.05
ANOVA:		
$F(\text{calc.}) = 4.171$ NS		

<u>Plant weight</u>	<u>Big Country</u>	<u>Darkland Cos</u>
Mean (gms)	596.9	482.6
Std. dev.	39.48	32.09
ANOVA:		
$F(\text{calc.}) = 32.58^*$		

<u>Core width</u>	<u>Big Country</u>	<u>Darkland Cos</u>
Mean (mm)	33.3	32.3
Std. dev.	1.28	0.43
ANOVA:		
$F(\text{calc.}) = 1.628$ NS		

<u>Core height</u>	<u>Big Country</u>	<u>Darkland Cos</u>
Mean (mm)	54.9	44.9
Std. dev.	1.94	3.71
ANOVA:		
$F(\text{calc.}) = 68.53^{**}$		

Trial 3. Bolting Trial. San Joaquin Valley, CA. Seeded: 4-16-02.

Measurements: 8-7-02. Sample size: 10 plants. Four replications.

Randomized Complete Block design.

ANOVA: $F(\text{req'd}) .05 = 10.13$

$F(\text{req'd}) .01 = 34.12$

Mature seed stalk height

Big Country

Darkland Cos

Mean (cm)

92.5

93.7

Std. dev.

1.06

2.86

ANOVA:

$F(\text{calc.}) = 0.449$ NS

Width of seed head

Mean (cm)

41.0

43.0

Std. dev.

0.39

2.17

ANOVA:

$F(\text{calc.}) = 2.576$ NS

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) <i>Pybas Vegetable Seed Co., Inc.</i>	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <i>PYB 6529</i>	3. VARIETY NAME <i>Big Country</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) <i>301 N. Depot Street P.O. Box 868 Santa Maria, CA 93456</i>	5. TELEPHONE (Include area code) <i>(805) 922-4624</i>	6. FAX (Include area code) <i>(805) 928-0293</i>
7. PVPO NUMBER <i>(</i>		<i>200300079</i>

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. National or a U.S. based company? If no, give name of country ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

*Big Country was developed by Keith Trammell, plant breeder
for Pybas Vegetable Seed Company.***PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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